PAGE 07/08

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REMARKS

NOV 2 8 2006

The Office Action objected to several claims that used the phrase "voltage booster" as not having proper antecedent basis. The current amendment has deleted this phrase.

The Office Action rejected claims 1-5, 9, 10 and 20 under §103(a) as being obvious over U.S. Patent No. 6,514,781 to Chang et al. in view of other cited references. The Office Action contends that Chang et al. describes a DC-to-DC converter connected at its input to a charge-storing device. This is incorrect.

The circuits described in Chang et al. specifically isolate the charge storing device from DC-to-DC converter.

The clamping voltage V_{clamp} from the DC-DC converter 330 is coupled to the clamping surface 306 through the isolator circuit 350. In the event of a power failure, the isolator circuit 350 prevents charge from leaking to ground through the DC-DC converter 330 and/or the HV driver 320. The isolator circuit 350 may be coupled to the microcontroller 310. The isolator circuit 350 may be configured to electrically isolate the DC-DC converter 330 and the HV driver 320 from the clamping surface 306 in the event power is lost to the controller 310. The isolator 350 may optionally include connections to a logic voltage V_{cc} and/or ground to facilitate isolation when the logic voltage V_{cc} drops due to a power failure. Furthermore, the isolator 350 may include a connection to the microcontroller 310 so that the controller 310 may signal the isolator circuit 350 to isolate the DC-DC converter 330 and the HV driver 320 from the clamping surface 306 if power is lost to the DC-DC converter 330. [col. 6; lines 12-28]

Chang et al. relies on charge storage device 300 to supply the clamping voltage to the MEMS device in the event of a power failure. Chang et al. does not disclose using the charge storage device to power the DC-to-DC converter as required by Applicant's claims. Attention is invited to the fact that the input to DC-to-DC converter 330 in the

4462424

s/n 10/633,264 112-0127US

PAGE

08/08

circuit described in Chang et al. is the terminal labeled "V_{cc}". This input is not connected to the charge storage device 300 as required by Applicant's claims. The entire purpose of Chang et al.'s circuit is to prevent leakage of the charge stored in charge storage device 300 through other elements (such as DC-to-DC converter 330). Thus, Chang et al. teaches away from Applicant's invention which uses the charge in the charge storage device to power the DC-to-DC converter for a time sufficient to complete a write cycle.

For the reasons discussed above, it is submitted that the claims are allowable over the cited references. Reconsideration of the rejection is requested.

Respectfully submitted:

Christopher D. Keirs

Reg. No. 32,248

Attorney for Applicant(s)

Wong Cabello Lutsch Rutherford & Brucculeri LLP

20333 State Hwy. 249 Suite 600

Houston, TX 77070

832 446-2406

Fax: 832 446-2424 ckeirs@counselip.com